osecos proparou

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A circuit arrangement for filtering and/or selecting single frequencies or 1. frequency ranges, particularly of signals intended for at least an integrated circuit and/or signals generated by at least an integrated fircuit, said circuit arrangement (100) comprising at least two electric resonant circuits (10; 20; 30)

with at least an inductive element (12; 22; 32) and

at least a capacitive element (14; 24; 34), characterized in that the resonant circults (10; 20; 30), particularly the inductive elements (12; 22; 32) are magnetically fixedly coupled to each other, and in that at least a part, preferably\_all resonant circuits (10; 20; 30) of the circuit arrangement (100) are arranged at or on the integrated circuit, particularly on only one metallization plate (40) of the integrated circuit, having an essentially constant ohmic resistance.

A circuit arrangement as claimed in claim 1, characterized in that the inductive 2. element (12; 22; 32) is constituted by at least a coil having an inductance (L1; L2; L3) and/or in that the capacitive element (14; 24; \$4) is constituted by at least a capacitor having a capacitance  $(C_1; C_2; C_3)$ .

A circuit arrangement as claimed in claim 1 or 2, characterized in that the 3. individual resonant circuits (10; 20; 30) are essentially arranged in a planar way on an outer side, particularly on an outer surface area of the integrated circuit.

A circuit arrangement as claimed in any one of claims 1 to 3, characterized in 4. that the individual resonant circuits (10; 20; 30) are constituted by essentially concentric geometric structures each having at least one turn as an inductive element (12; 22; 32) and each having a capacitor as a capacitive element (14; 24; 34).

A circuit arrangement/as claimed in claim 4, characterized in that the 5. geometric structure is a circle, an oval, an ellipse, a square, a rectangle or the like.





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- 6. A circuit arrangement as claimed in claim 4 or 5, characterized in that the capacitive element (14; 24; 34) is arranged at the ends of a single turn.
- 7. A circuit arrangement as claimed in any one of claims 1 to 6, characterized in that at least two inductive elements (12; 22; 32) each comprise one, preferably a plurality of turns which are substantially concentric and/or substantially parallel to each other.
  - 8. A circuit arrangement as claimed in any one of claims 1 to 7, characterized in that the capacitive elements (14; 24; 34) are arranged one after the other in essentially one direction (D).
  - 9. A circuit arrangement as claimed in any one of claims 1 to 8, characterized in that more than two resonant circuits (10; 20; 30) are magnetically fixedly coupled to each other.
  - 10. A circuit arrangement as claimed in any one of claims 1 to 9, characterized in that the resonant circuits (10; 20; 30) of the circuit arrangement (100) are arranged on the upper metallization plate (40) of the integrated circuit.
- 11. An integrated circuit comprising at least a circuit arrangement (100) as claimed in any one of claims 1 to 10.

